JVC

SERVICE MANUAL

COLOUR TELEVISION

AV-28BD5EES, AV-28BD5EES/A, AV-28BD5EKIS, AV-28BD5EKIS/A, AV-28BD5EPS, AV-28BD5EPS/A, AV-28BD50EPS

Supplementary

Parts No. of "MASK FRONT" was changed. For details other than those described in this manual, please refer to the AV-28BD5EES, AV-28BD5EKIS and AV-28BD5EPS service manual (No.51709, 2000/10) AV-28BD5EES/A, AV-28BD5EKIS/A and AV-28BD5EPS/A service manual (No.51709C, 2000/10) AV-28BD50EPS service manual (No.51709D, 2003/9).

DIFFERENCE LIST

PACKING & EXPLODED VIEW PARTS LIST

⚠	Ref. No.	Part No.		PART NAME	DESCRIPTION
		OLD	NEW		
⚠	1	PTFMSJ28B2FS	PTFMSJ0002S	MASK FRONT	AV-28BD5EES, AV-28BD5EES/A
⚠	1	PTFMSJ28B2FS	PTFMSJ0002S	MASK FRONT	AV-28BD5EKIS, AV-28BD5EKIS/A
⚠	1	PTFMSJ28B2FS	PTFMSJ0002S	MASK FRONT	AV-28BD5EPS, AV-28BD5EPS/A
⚠	1	PTFMSJ28B2FS	PTFMSJ0002S	MASK FRONT	AV-28BD50EPS

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No.51709E
2006/2

SECTION 1
PRECAUTION

Please refer to "AV-28BD5EES, AV-28BD5EKIS and AV-28BD5EPS (No.51709)" about this section.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

Please refer to "AV-28BD5EES, AV-28BD5EKIS and AV-28BD5EPS (No.51709)" about this section.

SECTION 3
DISASSEMBLY

Please refer to "AV-28BD5EES, AV-28BD5EKIS, and AV-28BD5EPS (No.51709)" about this section.

SECTION 4
ADJUSTMENT

Please refer to "AV-28BD5EES, AV-28BD5EKIS and AV-28BD5EPS (No.51709)" about this section.

SECTION 5
TROUBLESHOOTING

Please refer to "AV-28BD5EES, AV-28BD5EKIS and AV-28BD5EPS (No.51709)" about this section.

JVC
Victor Company of Japan, Limited
CRT Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.51709E)

Printed in Japan
VPT

AV-28BD5EKI AV-28BD5EP AV-28BD5EE
AV-28BD5EKIS AV-28BD5EPS AV-28BD5EES

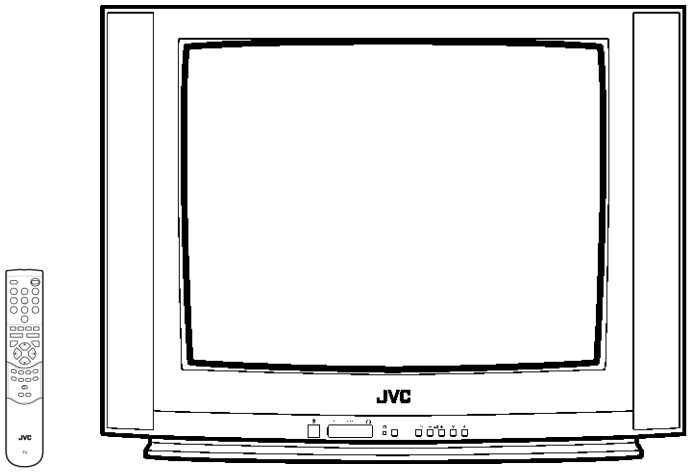
JVC

REVISED

SERVICE MANUAL

COLOUR TELEVISION

AV-28BD5EKI / AV-28BD5EP / AV-28BD5EE
AV-28BD5EKIS / AV-28BD5EPS / AV-28BD5EES



Please throw it out the service manual for AV-28BD5EKI/EKIS/EP/EPS/EE/EES issued in Jun 2000, and use this service manual (No.51709 Oct. 2000).

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No. 51709
Oct. 2000

SPECIFICATIONS

Item	Content
TV RF SYSTEM	B/G, I, D/K & L/L'
COLOUR STANDARD	PAL / SECAM / NTSC (AV only)
POWER INPUT	AC 230V, 50Hz
POWER CONSUMPTION	75W / 3W (Stand-by)
TELETEXT SYSTEM	FLOF (Fastext) / TOP / WST (standard system)
SOUND OUTPUT / SPEAKER	7W / 8Ω (×2)
PICTURE TUBE SIZE	VISIBLE AREA 66cm (measured diagonally)
ANTENNA INPUT	75Ω Unbalanced
NPUT / OUTPUT	FRONT [AV2] : RCA JACK (VIDEO / AUDIO) REAR [AV1 / AV2] : 21-PIN EURO CONNECTOR (SCART) × 2 (VIDEO / AUDIO / RGB / S. VHS) AV2 Input terminals in front and rear side are common
INTERMEDIATE FREQUENCIES	PIF : 38.9MHz (B/G, D/K, I, L) , 33.9MHz (L') SIF : 33.4MHz (PAL / SECAM – B/G) 32.9MHz (PAL / SECAM – I / I) 32.4MHz (PAL / SECAM – D/K, SECAM – L) 40.4MHz (SECAM – L')
	SOUND SUBCARRIER : 5.5MHz (PAL / SECAM – B/G) 6.0MHz (PAL / SECAM – I) 6.5MHz (PAL / SECAM – D/K, SECAM – L) 6.5MHz (SECAM – L')
	COLOUR SUBCARRIER : 4.43MHz (PAL) 4.250MHz / 4.406MHz (SECAM)
REMOTE CONTROL	48B00RMC71 [Battery : AAA (R03)] (EP, EPS, EE, EES) 48B00RMC72 [Battery : AAA (R03)] (EKI, EKIS)
DIMENSIONS (W × H × D)	760mm × 589mm × 475mm
MASS	32kg

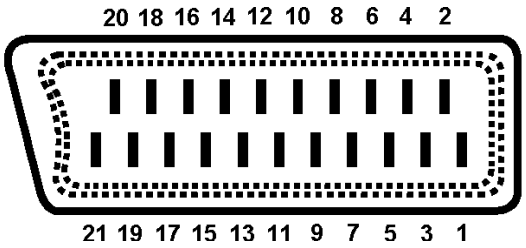
Design & specifications are subject to change without notice.

■21-pin Euro connector (SCART socket)

21-pin EURO-SCART 1 [AV1]

Pin No.	Signal Designation	Matching Value
1	Audio Output Right	0.5V(rms), Impedance :<1kΩ (RF 54% MOD)
2	Audio Input Right	0.5V(rms), Impedance :>10kΩ
3	Audio Output Left	0.5V(rms), Impedance :<1kΩ (RF 54% MOD)
4	Audio Earth	
5	Blue Earth	
6	Audio Input Left	0.5V(rms), Impedance :>10kΩ
7	Blue Input	0.7V(p-p) ±0.1V, Impedance :75Ω
8	Slow Switching	TV : 0-2V, AV 16/9 : 4.5-7V, AV 4/3 : 9.5-12V, Impedance :>10kΩ
9	Green Earth	
10	NC	
11	Green Input	0.7V(p-p) ±0.1V, Impedance : 75Ω
12	NC	
13	Red Earth	
14	Blanking Earth	
15	Red Input	0.7V(p-p) ±0.1V, Impedance : 75Ω
16	Fast Switching	0-0.4V : Logic “0”, 1-3V : Logic “1”, Impedance :75Ω
17	Video Out Earth	
18	Video In Earth	
19	Video Output	1V(p-p) ±3dB, Impedance :75Ω
20	Video Input	1V(p-p) ±3dB, Impedance :75Ω
21	Common Earth	

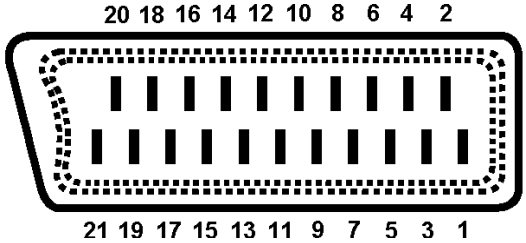
[Pin assignment]



21-pin EURO-SCART 2 [AV2]

Pin No.	Signal Designation	Matching Value
1	NC	
2	Audio Intput Right	0.5V(rms), Impedance :<10kΩ
3	NC	
4	Audio Earth	
5	Earth	
6	Audio Input Left	0.5V(rms), Impedance :>10kΩ
7	NC	
8	NC	
9	NC	
10	NC	
11	NC	
12	NC	
13	Earth	
14	Earth	
15	Chroma Input	±3dB for a luminance signal of 1V(p-p)
16	NC	
17	Earth	
18	Video In Earth	
19	NC	
20	Video Input, Y In.	1V(p-p) ±3dB, Impedance :75Ω
21	Common Earth	

[Pin assignment]



SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the +B setting should be checked or adjusted (See +B ADJUSTMENT).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

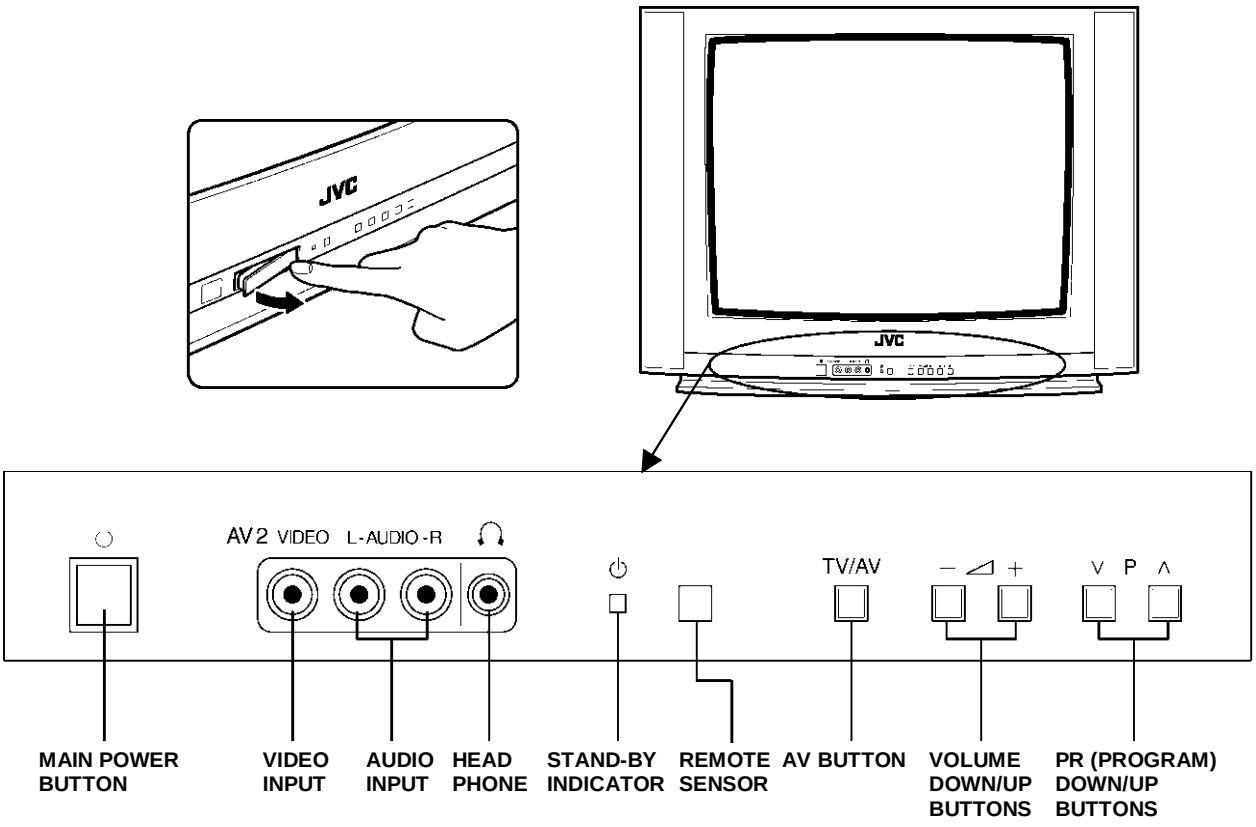
7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

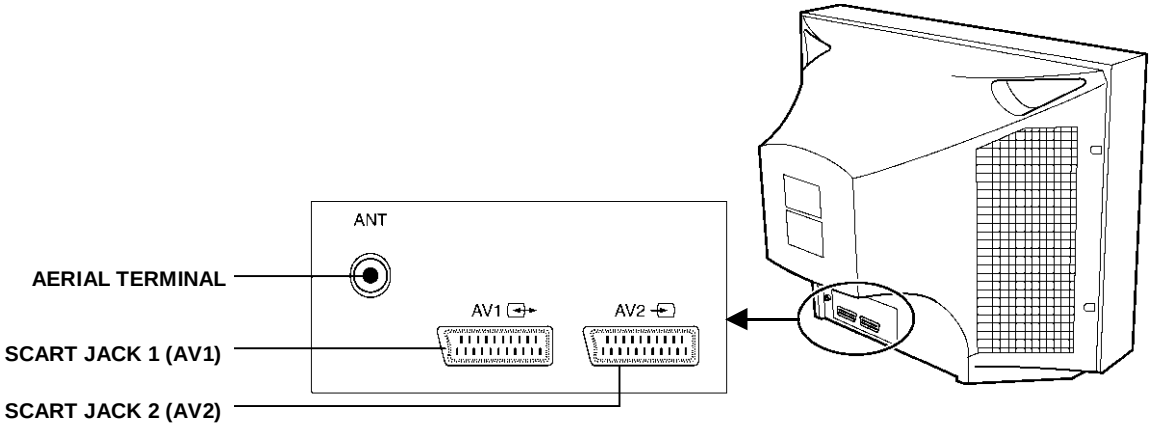
FUNCTIONS

LOCAL CONTROL

■FRONT



■BACK

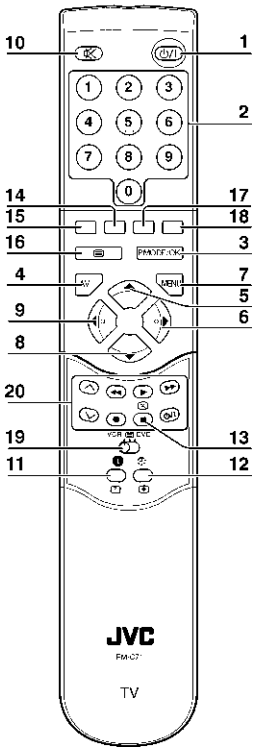


REMOTE CONTROL UNIT

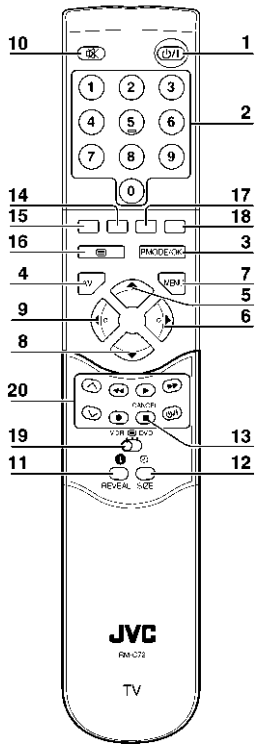
TV mode

1. POWER
2. NUMBER 0-9 / NUMBER
3. P.MODE / OK
4. AV
5. UP
6. RIGHT
7. MENU
8. DOWN
9. LEFT
10. MUTING
11. RECALL
12. SLEEP
13. Not used
14. MOVE
15. SKIP
16. TV / TEXT
17. DELETE
18. MODE
19. VCR / ▤ / DVD switch
20. VCR / DVD Control buttons

48B00RMC71
[EP / EPS / EE / EES]

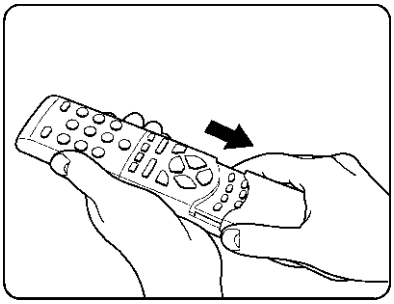


48B00RMC72
[EKI / EKIS]



TELETEXT mode

1. POWER
2. NUMBER 0-9
3. INDEX
4. Not used
5. UP
6. SUBPAGE
7. MENU
8. DOWN
9. HOLD
10. MUTING
11. REVEAL
12. SIZE
13. CANCEL
14. GREEN
15. RED
16. TV / TEXT
17. YELLOW
18. CYAN
19. VCR / ▤ / DVD switch
20. Not used



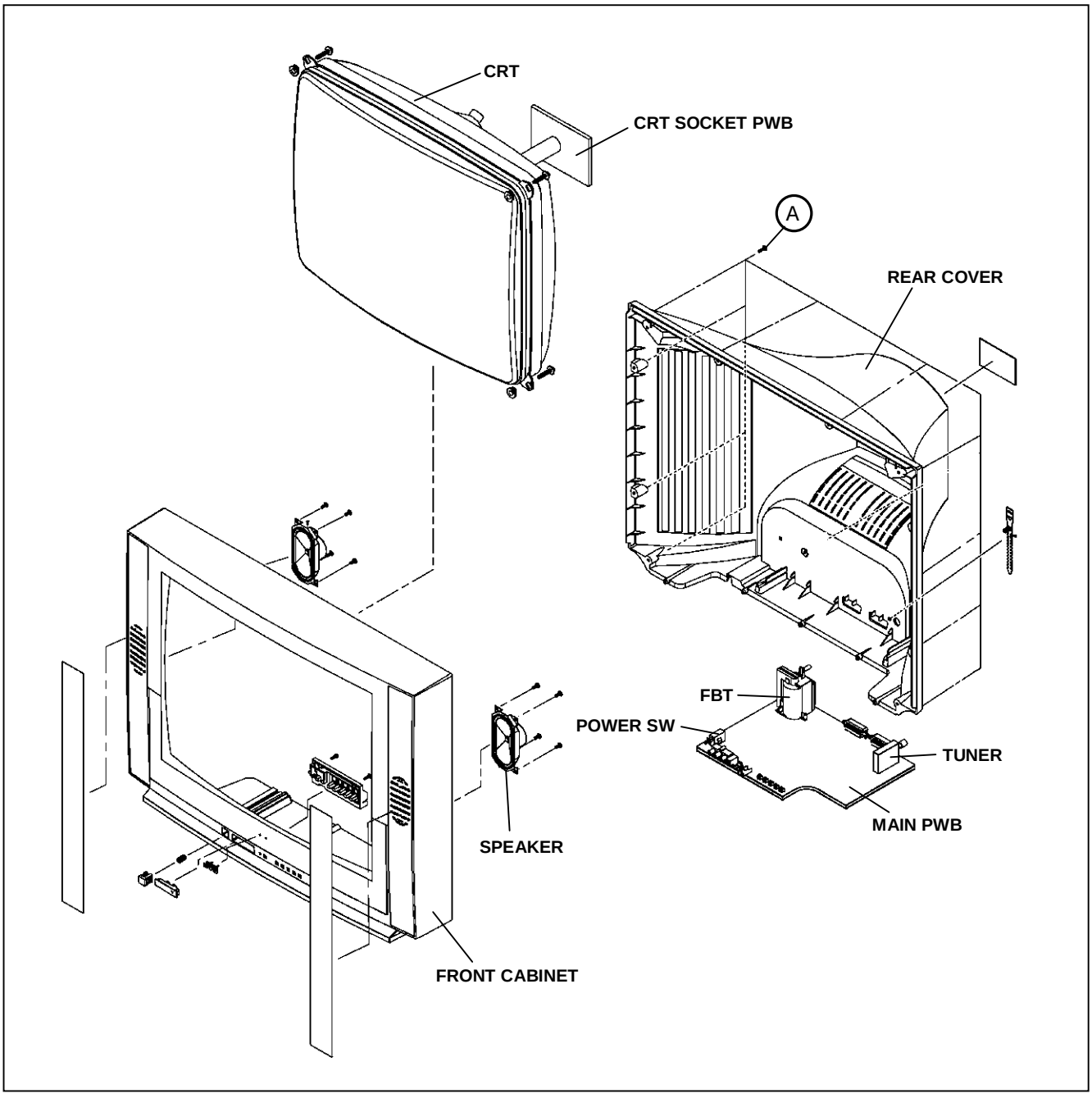
SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

Note : Before starting work, disconnect the power plug from the wall outlet.

HOW TO REMOVE THE REAR COVER

1. Remove the 10 screws marked [**A**].
2. Remove the rear cover backward.



MEMORY IC REPLACEMENT

1. **Important :**
   After replacing the MEMORY IC (IC702) , certainly use the JVC REMOTE CONTROL UNIT to turn on the power.
2. If other maker (DAEWOO) REMOTE CONTROL UNIT is initially used, there is risk the TV set will no longer operate with the JVC REMOTE CONTROL UNIT.
3. If the TV set is initialized to operate with the other maker (DAEWOO) REMOTE CONTROL UNIT, there is need to yet again replace the MEMORY IC (IC702) .

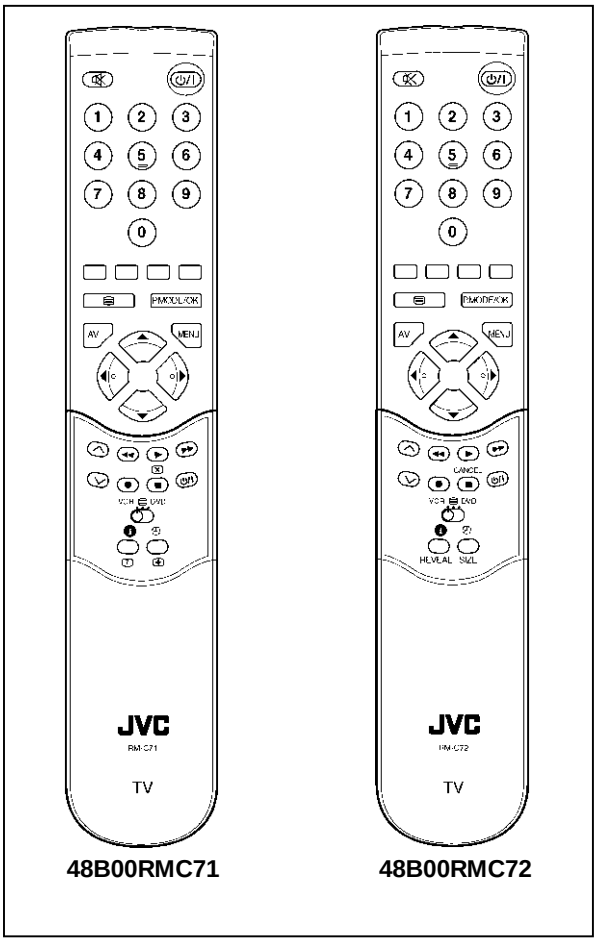
SERVICE ADJUSTMENTS

BEFORE ADJUSTMENT AND MAINTENANCE

1. Don't short any two soldering points or connect any component while TV set is power on.
2. Withdraw power plug before maintenance.
3. In order to ensure safety all components replaced should be identical. (For further details, refer to the component name and component No. in PARTS LIST.)
4. Must be warm up the set for 30 minutes or more and degauss CRT thoroughly with demagnetizer coil before adjustment.

EQUIPMENT FOR ADJUSTMENT

1. Pattern Generator
2. Digital volt meter
3. Oscilloscope
4. Demagnetizer
5. Remote control unit



48B00RMC71 **48B00RMC72**

Remote Control unit

BASIC OPERATION OF SERVICE MENU

How to ENTER and EXIT from SERVICE MODE

1. Press the MUTING KEY and RECALL KEY of the REMOTE CONTOROL UNIT at the same time to display the service MENU screen shown Fig. A and Fig. B.
2. When exiting from the SERVICE MODE, turn the power switch off.

How to set SERVICE MODE

1. Select the setting item you want to change with the P.(▲)/ P.(▼) key on the REMOTE CONTROL UNIT. (The item you selected will be indicated by YELLOW on the display.)
2. When changing the set values, use the ◀ -/▶ +KEY on the REMOTE CONTROL UNIT.
3. When the setting has been completed, turn the power switch off.
   (The changed set values are stored in memory.)

SERVICE MENU screen selection

- Press the P.(▲) / P.(▼) key ····· select menu item.
  (The letters of the selected items are displayed in yellow)
- Press the ◀ - / ▶ + key ····· setting the value item.

No	Adjustment item
1	AGC
2	Black R
3	Black G
4	WP Red
5	WP Green
6	WP Blue
7	H Parall
8	H Bow
9	H Shift
10	V Slope
11	V Amp
12	V S Cor
13	V Shift
14	H Width
15	EW Parabo
16	Up Corner
17	Dw Corner
18	EW Trapez
19	Option

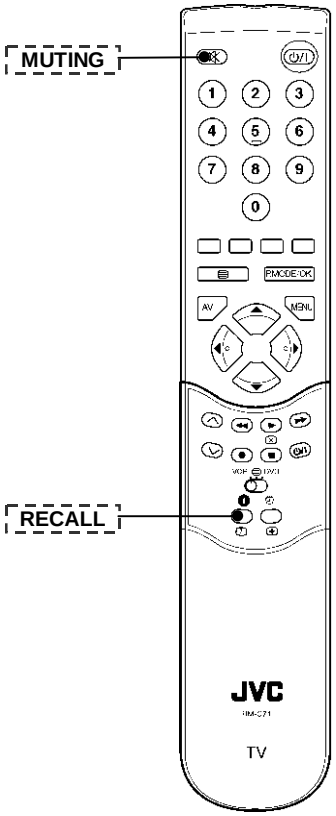


Fig. A

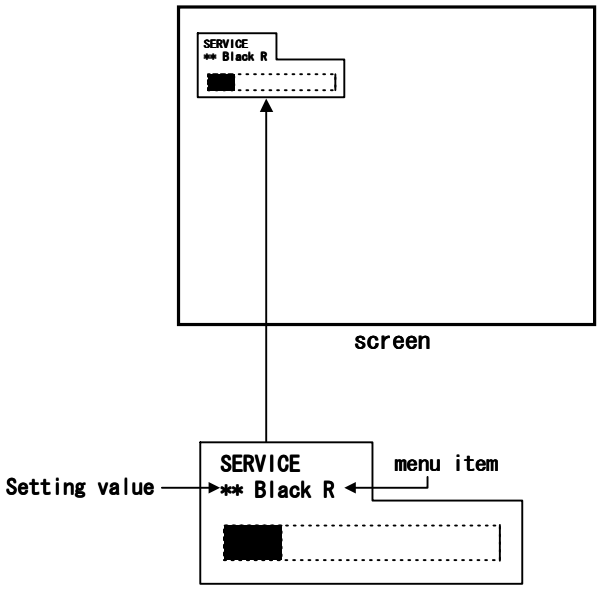


Fig. B

ADJUSTMENTS

+B VOLTAGE CHECK

1. Receive the standard colour bar signal.
2. Connect digital voltmeter between + of B1 Line circuit and GND.
3. Confirm that voltage is DC 142V ± 2.0V.

SCREEN

1. Set TV in AV mode without video signal ⇒ Black screen.
2. Set [WP Red], [WP Green] and [WP Blue] equal to “32”.
3. Set [Black R], [Black G] equal to “8”.
4. Set TV in normal I mode.
5. Adjust SCREEN VR (on FBT) such that the highest cathode cut-off voltage measured on CRT SOCKET PWB ASS’Y is DC 140V ± 5V.

WHITE BALANCE

NOTE : Confirm SCREEN Adjustment has been adjusted.

■ LOW LIGHT

1. Input the 10-step gray scale signal. (include 10% Black)
2. Enter the SERVICE MODE.
3. Turn the SCREEN VR (on FBT) gradually, to where the 2nd gray bar(10% Black) faintly visible.
4. Adjust [Black B] and [Black R] not to the colours on the gray bar.

■ HIGH LIGHT

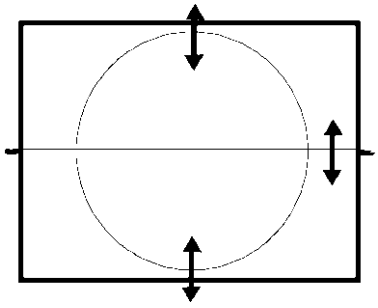
5. Apply the white signal.
6. Adjust [R DRIVE] and [G DRIVE] so that the picture becomes white.

FOCUS

1. Input the crosshatch pattern signal.
2. Adjust the FOCUS VR (on FBT) to have the best resolution on screen.

VERTICAL GEOMETRY

Adjust [V Amp], [V Shift] and [V Slope], [V Slope] [V S Cor] to compensate for vertical distortion.

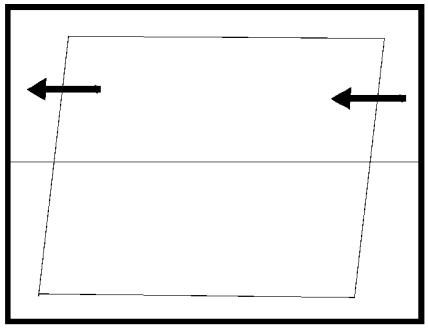


HORIZONTAL PICTURE CENTERING

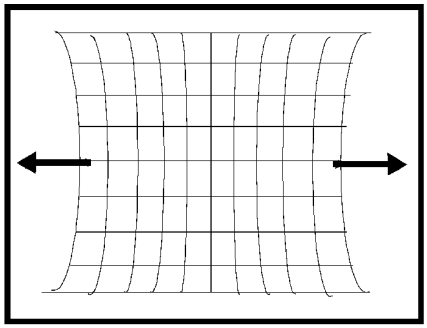
Adjust [H Shift] to have the picture in the center of the screen.

EAST / WEST CORRECTION

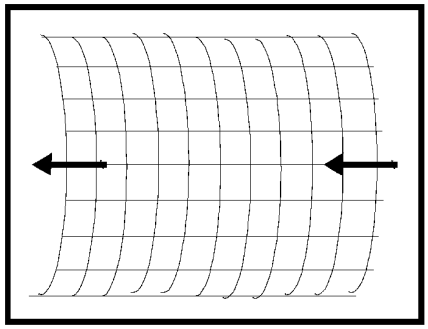
Adjust [H. Parall], [H. Bow], [H. Widdth], [EW. Parabo], [Up Corner], [Dw Corner], [EW Trapez] to compensate for geometrical distortion.



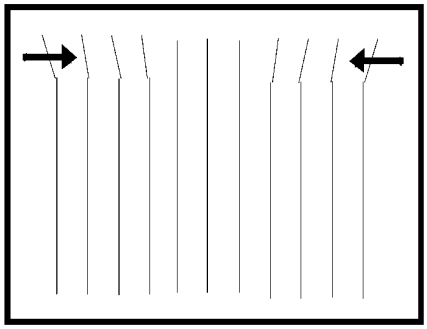
H. Parall



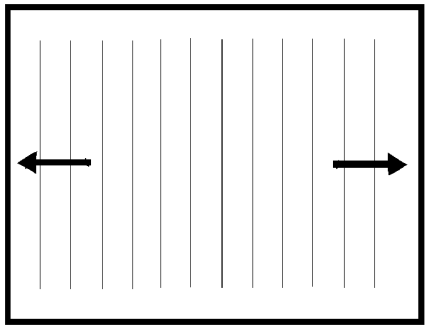
EW.Parabo



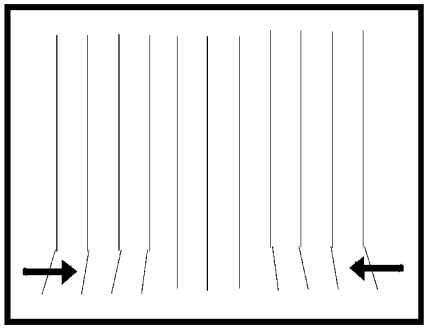
H. Bow



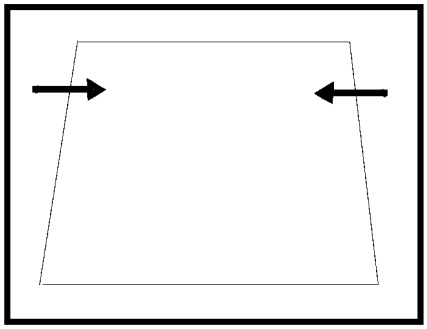
Up Corner



H.Width



Dw Corner



EW Trapez

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, TRANSISTOR, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	CERA C	Ceramic Capacitor
V R	Variable Resistor	ELECTRO C	Electrolytic Capacitor
		MYLAR C	Mylar Capacitor
TR	Transistor		

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

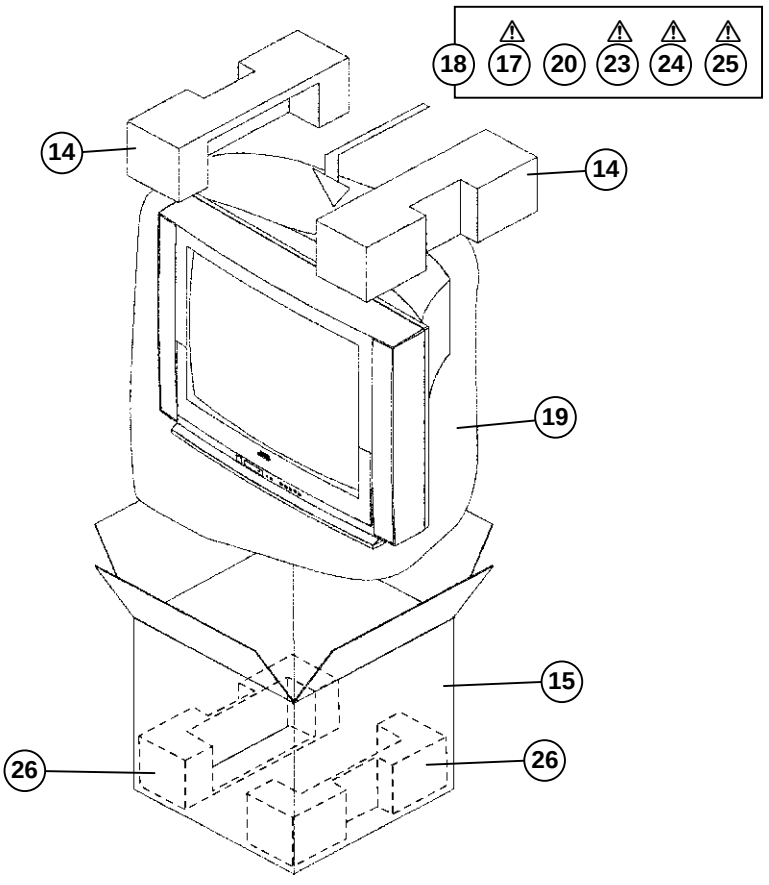
USING PW BOARD & REMOTE CONTROLLER

Model / PB ASSY	AV-28BD5EKI AV-28BD5EKIS	AV-28BD5EP AV-28BD5EPS	AV-28BD5EE AV-28BD5EES
MAIN PWB **(with CRT SOCKET PWB)**	PTMPMSE80FJW	←	PTMPMSE83FJW
REMOTE CONTROLLER	48B00RMC72	48B00RMC71	←

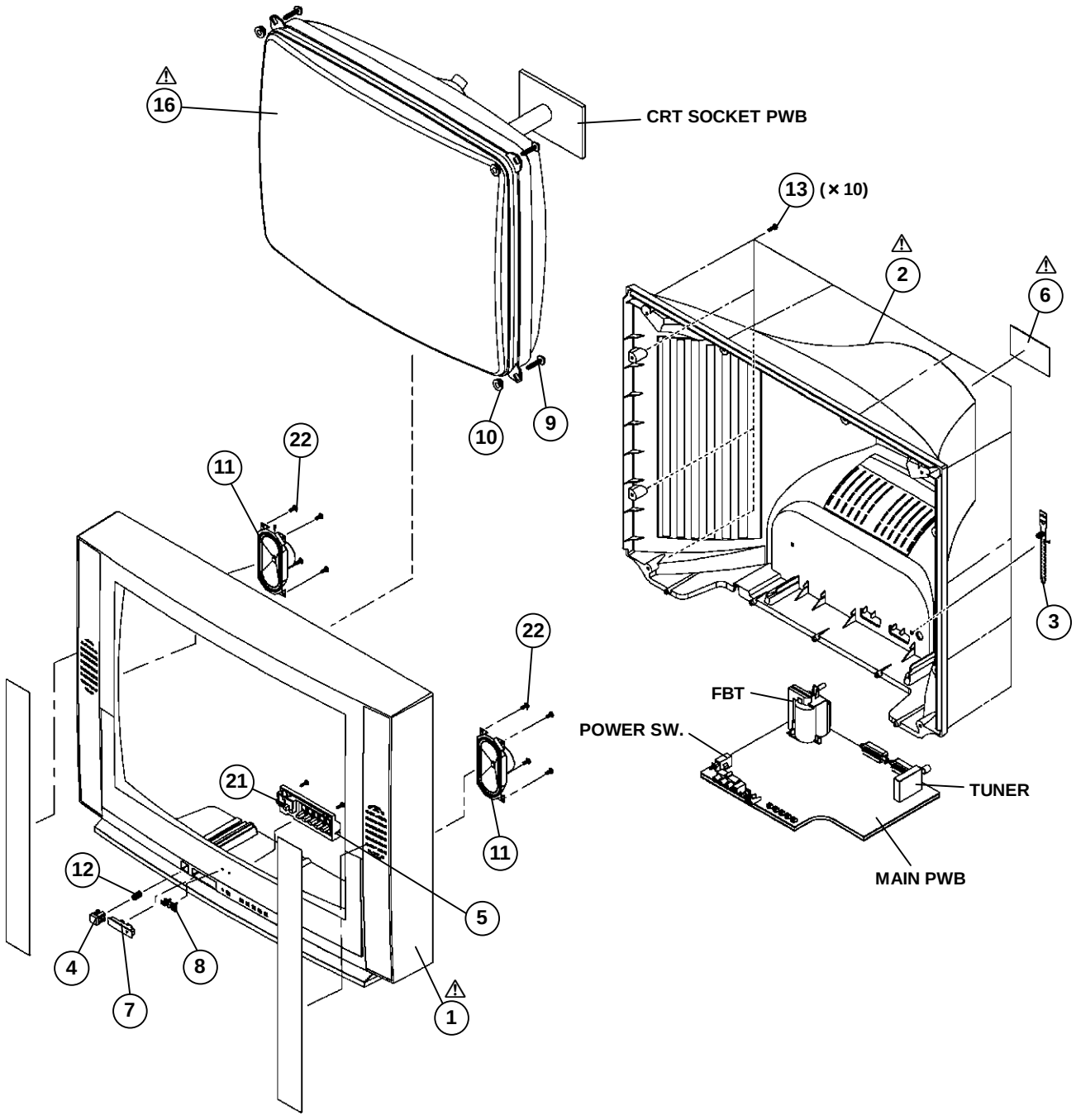
■PACKING & EXPLODED VIEW PARTS LIST

MODEL			AV-28BD5EKI	AV-28BD5EKIS	AV-28BD5EP	AV-28BD5EPS	AV-28BD5EE	AV-28BD5EES	
Part Name	⚠	Ref.	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Description
MASK FRONT	⚠	1	PTFMSJ28B2F	PTFMSJ28B2FS	PTFMSJ28B2F	PTFMSJ28B2FS	PTFMSJ28B2F	PTFMSJ28B2FS	
COVER BACK	⚠	2	4852157002	4852157002	4852157002	4852157002	4852157002	4852157002	
CLAMP CORD		3	97P4602700	97P4602700	97P4602700	97P4602700	97P4602700	97P4602700	
BUTTON POWER		4	4854857301	4854857302	4854857301	4854857302	4854857301	4854857302	
BUTTON CH		5	4854946701	4854946702	4854946701	4854946702	4854946701	4854946702	
SPEC PLATE	⚠	6	4855415800	4855415800	4855415800	4855415800	4855415800	4855415800	
COVER JACK		7	4857537301	4857537302	4857537301	4857537302	4857537301	4857537302	
MARK BRAND		8	4855622600	4855622600	4855622600	4855622600	4855622600	4855622600	
SCREW CRT FIX		9	4856015800	4856015800	4856015800	4856015800	4856015800	4856015800	(x4)
WASHER RUBBER		10	4856215401	4856215401	4856215401	4856215401	4856215401	4856215401	(x4)
SPEAKER		11	4858311110	4858311110	4858311110	4858311110	4858311110	4858311110	(x2)
SPRING		12	4856716000	4856716000	4856716000	4856716000	4856716000	4856716000	
SCREW TAPPING		13	7172401612	7172401612	7172401612	7172401612	7172401612	7172401612	(x10)
PAD		14	4858194500UP	4858194500UP	4858194500UP	4858194500UP	4858194500UP	4858194500UP	
BOX CARTON		15	4858055800	4858055800	4858055800	4858055800	4858055800	4858055800	
CRT (ITC :INC DY)	⚠	16	4859622160	4859622160	4859622160	4859622160	4859622160	4859622160	
INST. MANUAL(ENG.&BUL.)	⚠	17	IM-294-01/04-00	IM-294-01/04-00	IM-294-01/04-00	IM-294-01/04-00	IM-294-01/04-00	IM-294-01/04-00	
BAG POLY		18	4858211400F	4858211400F	4858211400F	4858211400F	4858211400F	4858211400F	
BAG P.E		19	4858216202F	4858216202F	4858216202F	4858216202F	4858216202F	4858216202F	
REMOTE CONTROLLER		20	48B00RMC72	48B00RMC72	48B00RMC71	48B00RMC71	48B00RMC71	48B00RMC71	
DECO SENSOR		21	4855541801	4855541801	4855541801	4855541801	4855541801	4855541801	
SCREW TAPPING		22	7172401212	7122401212	7122401212	7122401212	7122401212	7122401212	(x8)
INST. MANUAL(GER.&FRE. SPA. DUT. ITA.)	⚠	23	-	-	IM-295-01/04-00	IM-295-01/04-00	-	-	
INST. MANUAL(FIN.&SWE. NOR. DAN. POR)	⚠	24	-	-	IM-296-01/04-00	IM-296-01/04-00	-	-	
INST. MANUAL(POL.&CZE. HUN. RUM.)	⚠	25	-	-	-	-	IM-297-01/04-00	IM-297-01/04-00	
PAD		26	4858194500DN	4858194500DN	4858194500DN	4858194500DN	4858194500DN	4858194500DN	
POWER CORD	⚠		4859906310	4859906310	4859906210	4859906210	4859906210	4859906210	
DEGAUSSING COIL	⚠		58G0000125	58G0000125	58G0000125	58G0000125	58G0000125	58G0000125	
WARRANTY CARD			GPWJV1V2022	GPWJV1V2022	GPWJV1V2022	GPWJV1V2022	GPWJV1V2022	GPWJV1V2022	

■PACKING



■EXPLODED VIEW



■ELECTRICAL PARTS LIST

⚠	Symbol No.	Part No.	Part Name	Description
	C106	CEXF1H221V	C ELECTRO	50V RSS 220MF (10X16) TP
	C305	CEXF1E471V	C ELECTRO	25V RSS 470MF (10X16) TP
	C315	CEXF2C470C	C ELECTRO	160V RUS 47MF (13X25) TP
	C402	CMYH3C562J	C MYLAR	1.6KV 5600PF J (BUP)
	C404	CMYH3C472J	C MYLAR	1.6KV 4700PF J (BUP)
	C408	CMYE2G304J	C MYLAR	400V 0.3MF J (PL)
	C415	CEXF2E479V	C ELECTRO	250V RSS 4.7MF (10X16)TP
	C430	CCYR3D681K	C CERA	2KV R 680PF K 125C
	C431	CMXB2G472J	C MYLAR	400V 4700PF J TP
	C440	CMYE2G273J	C MYLAR	400V 0.027MF J (PL)
	C499	CEYD1H689W	C ELECTRO	50V RHD 6.8MF (16X35.5)
	C604	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP
⚠	C801	CL1JB3474K	C LINE ACROSS	AC250V 0.47MF U/C/SNDF/SV
	C805	CEYN2G181P	C ELECTRO	400V LHS 180MF (25X35)
	C810	CBXB3D102K	C CERA SEMI	2KV BL(N) 1000PF K (T)
⚠	C812	CH1AFE472M	C CERA AC	4KV 4700PF M KX DE1610
	C813	CEXF2E101V	C ELECTRO	250V RSS 100MF 18X35.5
	C814	CEYF2E470V	C ELECTRO	250V RSS 47MF (16X25
	C820	CCYR3A471K	C CERA	1KV 470PF K 125C
	C823	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP
	C824	CCYR3A471K	C CERA	1KV 470PF K 125C
	C831	CCYR3A471K	C CERA	1KV 470PF K 125C
	C832	CEXF1E102V	C ELECTRO	25V RSS 1000MF (13X20) TP
	C840	CEXF1C222V	C ELECTRO	16V RSS 2200MF(13X25)TP
	C841	CEXF1C222V	C ELECTRO	16V RSS 2200MF(13X25)TP
	C861	CEXF1E102C	C ELECTRO	25V RUS 1000MF 13X20 TP
	C866	CCYR3A471K	C CERA	1KV 470PF K 125C
	C905	CEXF2E479V	C ELECTRO	250V RSS 4.7MF (10X16)TP
	C965	CBXB3D102K	C CERA SEMI	2KV BL(N) 1000PF K (T)
	D100	DSML1216W-	LED	SML1216W
	D403	DDG3------	DIODE	DG3
	D404	DRGP30J---	DIODE	RGP30J
	D820	DBYW76----	DIODE	BYW76
	D860	DBYW76----	DIODE	BYW76
⚠	F801	5FSCB4022R	FUSE CERA	SEMKO F4AH 4A 250V MF51
	HP1	4859102130	JACK EARPHONE	YSC-1537
	I301	1TDA8358J-	IC VERTICAL	TDA8358J
	I501	1DW3653BE3	IC MAIN	(AV-28BD5EKI/EKIS/EP/EPS)
	I501	1DW3653BD3	IC MAIN	(AV-28BD5EE/EES)
	I601	1MSP3415D-	IC RF	MSP-3415D
	I602	1TDA8946J-	IC AUDIO	TDA8946J
	I702	1AT24C08PC	IC MEMORY	AT24C08-10PC
	I703	1TSOP1238W	IC PREAMP	TSOP1238WI1
	I801	1STRF6653-	IC SMPS	STR-F6653
⚠	I804	1LTV817C--	IC PHOTO COUPLER	LTV-817C
	I806	1SE130N---	IC	SE130N
	I810	TX0202DA--	THYRISTOR	X0202DA
	I820	1KA7805---	IC REGULATOR	KA7805
	I822	1KA7808---	IC REGULATOR	KA7808
	I823	1LE33CZ---	IC REGULATOR	LE33CZ
	I901	1TDA6107Q-	IC VIDEO	TDA6107Q
	JPA1	4859200401	SOCKET RGB	SR-21A1 (ANGLE TYPE)
	JPA2	4859200401	SOCKET RGB	SR-21A1 (ANGLE TYPE)
	JPA3	4859108450	JACK PIN BOARD	YSC03P-4120-14A
	L350	58C0000120	COIL CHOKE	CH-100Q
	L381	58C0000120	COIL CHOKE	CH-100Q
	L401	58H0000025	COIL H-LINEARITY	TRL-330
	L402	58C7070085	COIL CHOKE	TLN-3062A
	L802	58C9430599	COIL CHOKE	AZ-9004Y(94MH)
⚠	LF801	5PLF24A1--	FILTER LINE	LF-24A1
	M351	4853533600	HOLDER LED	P.P BK
	Q401	T2SD2499--	TR	2SD2499 H OUT
	R331	RS01Y181J-	R M-OXIDE FILM	1W 180 OHM J
	R399	RS02Y120JS	R M-OXIDE FILM	2W 12 OHM J SMALL
	R406	RS02Y821JS	R M-OXIDE FILM	2W 820 OHM J SMALL
	R415	RS02Y102JS	R M-OXIDE FILM	2W 1K OHM J SMALL
	R450	RS02Y223JS	R M-OXIDE FILM	2W 22K OHM J SMALL
	R801	DT120B801Q	POSISTOR	T120-B80-A110
	R802	RS02Y753JS	R M-OXIDE FILM	2W 75K OHM J SMALL
	R803	RS02Y473JS	R M-OXIDE FILM	2W 47K OHM J SMALL
⚠	R804	RF02Y228K-	R FUSIBLE	2W 0.22 OHM K
	R806	RS01Y472J-	R M-OXIDE FILM	1W 4.7K OHM J
	R808	RS02Y821JS	R M-OXIDE FILM	2W 820 OHM J SMALL
	R819	RX10B339JN	R CEMENT	10W 3.3 OHM J BENCH 4P
⚠	R920	RF01Y129JA	R FUSIBLE	1W 1.2 OHM J A CURVE
⚠	SCT1	4859303530	SOCKET CRT	PCS629-03C
	SF1	5PK3953M--	FILTER SAW	K3953M
	SF2	5PK9650M--	FILTER SAW	K9650M

⚠	Symbol No.	Part No.	Part Name	Description
⚠	SW801	5S40101143	SW PUSH	PS3-22SP (P.C.B) MAIN POWER
	T401	50D19A1---	TRANS DRIVE	TD-19A1
⚠	T402	50H0000205	FBT	1342.0026
⚠	T801	50M4936B1-	TRANS SMPS	2094.0041
	X502	5XE12R000E	CRYSTAL QUARTZ	HC-49/U 12.00000MHZ 30PPM
	X601	5XE18R432E	CRYSTAL QUARTZ	HC-49/U 18.43200MHZ 30PPM
	Z501	5PYXT5R5MB	FILTER CERA	XT5.5MB
	C101	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C102	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3*11) TP
	C104	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
	C120	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
	C121	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C313	CMXM2A104J	C MYLAR	100V 0.1MF J TP
	C320	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C350	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)
	C351	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)
	C370	CMXM2A473J	C MYLAR	100V 0.047MF J TP
	C401	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3*11) TP
	C412	CEXF2C339V	C ELECTRO	160V RSS 3.3MF (8X16) TP
	C414	CMXM2A104J	C MYLAR	100V 0.1MF J TP
	C418	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
	C420	CCXB2H222K	C CERA	500V B 2200PF K (TAPPING)
	C500	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP
	C501	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C509	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP
	C511	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
	C512	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
	C514	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C517	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C519	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C524	CMXB1H104J	C MYLAR	50V EU 0.1MF J (TP)
	C525	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
	C526	CMXB1H104J	C MYLAR	50V EU 0.1MF J (TP)
	C527	CMXM2A473J	C MYLAR	100V 0.047MF J TP
	C528	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C530	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C531	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)
	C532	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C537	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C540	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
	C541	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
	C542	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C543	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C550	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP
	C555	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP
	C560	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C561	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C564	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C565	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C585	CCXB1H222K	C CERA	50V B 2200PF K (TAPPING)
	C590	CXCH1H270J	C CERA	50V CH 27PF J (TAPPING)
	C591	CXCH1H270J	C CERA	50V CH 27PF J (TAPPING)
	C592	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C593	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
	C601	CCXB1H472K	C CERA	50V B 4700PF K (TAPPING)
	C602	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C603	CCXB1H472K	C CERA	50V B 4700PF K (TAPPING)
	C605	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP
	C608	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C610	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C611	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP
	C612	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C613	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C614	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C615	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP
	C616	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
	C617	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C620	CXCH1H509D	C CERA	50V CH 5PF D (TAPPING)
	C621	CXCH1H509D	C CERA	50V CH 5PF D (TAPPING)
	C622	CCXF1H223Z	C CERA	50V F 0.022MF Z (TAPPING)
	C625	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5*11) TP
	C626	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5*11) TP
	C629	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C630	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP
	C631	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C635	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
	C636	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP
	C650	CXCH1H470J	C CERA	50V CH 47PF J (TAPPING)

⚠ Symbol No.	Part No.	Part Name	Description
C660	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP
C661	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
C662	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
C665	CCXB1H472K	C CERA	50V B 4700PF K (TAPPING)
C666	CBXF1H104Z	C CERA SEMI	50V F 0.1MF Z (TAPPING)
C667	CCXB1H472K	C CERA	50V B 4700PF K (TAPPING)
C668	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
C669	CMXB1H224J	C MYLAR	50V EU 0.22MF J(TP)
C690	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5*11) TP
C691	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5*11) TP
C698	CXCH1H470J	C CERA	50V CH 47PF J (TAPPING)
C699	CXCH1H470J	C CERA	50V CH 47PF J (TAPPING)
C770	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
C803	CCXF3A472Z	C CERA	1KV F 4700PF Z (T)
C804	CCXF3A472Z	C CERA	1KV F 4700PF Z (T)
C806	CEXF1H330V	C ELECTRO	50V RSS 33MF (6.3X11) TP
C807	CCXF1H473Z	C CERA	50V F 0.047MF Z (TAPPING)
C808	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5*11) TP
C821	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
C835	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3*11) TP
C844	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
C863	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP
C888	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP
C910	CCXB1H561K	C CERA	50V B 560PF K (TAPPING)
C950	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP
C968	CMXL2E104K	C MYLAR	250V 0.1MF K MEU TP
CA10	CCXB1H102K	C CERA	50V B 1000PF K (TAPPING)
F801A	4857415001	CLIP FUSE	PFC5000-0702
F801B	4857415001	CLIP FUSE	PFC5000-0702
I805	1UPC574J--	IC	UPC574J
Q101	T2SC5343Y-	TR	2SC5343Y
Q103	TKTC3202Y-	TR	KTC3202Y
Q402	T2SD1207T-	TR	2SD1207-T (TAPPING)
Q501	TSTA933Y--	TR	STA933-Y
Q502	T2SC5343Y-	TR	2SC5343Y
Q503	T2SC5343Y-	TR	2SC5343Y
Q504	T2SC5343Y-	TR	2SC5343Y
Q505	T2SC5343Y-	TR	2SC5343Y
Q507	TSTA933Y--	TR	STA933-Y
Q508	T2SC5343Y-	TR	2SC5343Y
Q509	TSTA933Y--	TR	STA933-Y
Q510	TSTA933Y--	TR	STA933-Y
Q511	TSTA933Y--	TR	STA933-Y
Q807	T2SC5343Y-	TR	2SC5343Y
Q808	T2SC5343Y-	TR	2SC5343Y
Q809	T2SC5343Y-	TR	2SC5343Y
Q810	T2SC5343Y-	TR	2SC5343Y
Q811	T2SC5343Y-	TR	2SC5343Y
Q950	T2SC5343Y-	TR	2SC5343Y
SW700	5S50101090	SW TACT	SKHV17910APR UP
SW701	5S50101090	SW TACT	SKHV17910APR DOWN
SW702	5S50101090	SW TACT	SKHV17910AVOL UP
SW703	5S50101090	SW TACT	SKHV17910AVOL DOWN
SW704	5S50101090	SW TACT	SKHV17910ATV/AV
Z601	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z602	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z603	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z604	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z605	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z606	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z607	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z608	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z609	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
Z610	5PXF1B471M	FILTER EMI	CFI 06 B 1H 470PF
C103	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
C108	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
C110	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
C513	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
C515	CBZR1C222M	C CERA	Y5R 16V 2200PF M AXIAL
C516	CBZR1C472M	C CERA	Y5R 16V 4700PF M AXIAL
C518	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
C520	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
C521	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
C523	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
C529	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
C533	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
C534	CCZF1H223Z	C CERA	50V F 0.022MF Z
C535	CCZF1H223Z	C CERA	50V F 0.022MF Z

⚠	Symbol No.	Part No.	Part Name	Description
	C536	CCZF1H223Z	C CERA	50V F 0.022MF Z
	C577	CCZB1H561K	C CERA	50V B 560PF K (AXIAL)
	C587	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	C588	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	C589	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	C771	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
	C809	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)
	C830	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z (AXIAL)
	C850	CCZB1H821K	C CERA	50V B 820PF K (AXIAL)
	CA01	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	CA02	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	CA03	CCZB1H101K	C CERA	50V B 100PF K (AXIAL)
	D101	DBAT85----	DIODE	BAT85 (TAPPING)
	D102	D1SS85TA--	DIODE	1SS85TA
	D313	DBYW36----	DIODE	BYW36 (TAPPING)
	D360	DTZX22C---	DIODE ZENER	TZX22C (TAPPING)
	D361	DUZ33B----	DIODE ZENER	UZ-33B
	D367	DUZ33B----	DIODE ZENER	UZ-33B
	D381	DUZ33B----	DIODE ZENER	UZ-33B
	D405	DBYW36----	DIODE	BYW36 (TAPPING)
	D407	DBYW36----	DIODE	BYW36 (TAPPING)
	D408	DBYW36----	DIODE	BYW36 (TAPPING)
	D410	D1N4004---	DIODE	1N4004
	D411	D1N4004---	DIODE	1N4004
	D414	D1N4004---	DIODE	1N4004
	D450	DBYW36----	DIODE	BYW36 (TAPPING)
	D502	DTZX3V9B--	DIODE ZENER	TZX3V9B
	D520	D1N4148---	DIODE	1N4148 (TAPPING)
	D521	D1N4148---	DIODE	1N4148 (TAPPING)
	D591	DTZX2V4A--	DIODE ZENER	TZX2V4A
	D710	DTZX5V1B--	DIODE ZENER	TZX5V1B (TAPPING)
⚠	D801	DBYT51J---	DIODE	BYT51J (TAPPING)
⚠	D802	DBYT51J---	DIODE	BYT51J (TAPPING)
⚠	D803	DBYT51J---	DIODE	BYT51J (TAPPING)
⚠	D804	DBYT51J---	DIODE	BYT51J (TAPPING)
	D805	DBYW36----	DIODE	BYW36 (TAPPING)
	D806	DBYW36----	DIODE	BYW36 (TAPPING)
	D808	DBYW36----	DIODE	BYW36 (TAPPING)
	D809	DBYW36----	DIODE	BYW36 (TAPPING)
	D810	DBYW36----	DIODE	BYW36 (TAPPING)
	D811	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	D821	DBYW36----	DIODE	BYW36 (TAPPING)
	D822	DTZX9V1B--	DIODE ZENER	TZX9V1B (TAPPING)
	D824	D1N4148---	DIODE	1N4148 (TAPPING)
	D825	D1N4148---	DIODE	1N4148 (TAPPING)
	D830	DBYW36----	DIODE	BYW36 (TAPPING)
	D831	DBYW36----	DIODE	BYW36 (TAPPING)
	D840	D1N4148---	DIODE	1N4148 (TAPPING)
	D841	D1N4148---	DIODE	1N4148 (TAPPING)
	D904	DBAV21----	DIODE	BAV21 (TAPPING)
	D905	DBAV21----	DIODE	BAV21 (TAPPING)
	D906	DBAV21----	DIODE	BAV21 (TAPPING)
	D951	D1N4148---	DIODE	1N4148 (TAPPING)
	D952	D1N4148---	DIODE	1N4148 (TAPPING)
	D953	D1N4148---	DIODE	1N4148 (TAPPING)
	D954	D1N4148---	DIODE	1N4148 (TAPPING)
	DA01	D1N4148---	DIODE	1N4148 (TAPPING)
	DA02	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA03	DTZX5V1B--	DIODE ZENER	TZX5V1B (TAPPING)
	DA04	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA06	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA08	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA09	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA10	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA11	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA13	CBZR1C222M	C CERA	Y5R 16V 2200PF M AXIAL
	DA14	CBZR1C222M	C CERA	Y5R 16V 2200PF M AXIAL
	DA15	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA16	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA20	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	DA23	CBZR1C222M	C CERA	Y5R 16V 2200PF M AXIAL
	DA24	CBZR1C222M	C CERA	Y5R 16V 2200PF M AXIAL
	DA27	DTZX5V6B--	DIODE ZENER	TZX5V6B (TAPPING)
	L101	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)
	L500	5CPZ120K02	COIL PEAKING	12UH 3.5MM K(LAL02TB)
	L501	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)
	L502	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)
	L510	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)

⚠ Symbol No.	Part No.	Part Name	Description
L511	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)
L512	5CPZ100K02	COIL PEAKING	10UH 3.5MM K(LAL02TB)
L601	5CPZ479K02	COIL PEAKING	4.7UH 3.5MM K (LAL02TB)
L602	5CPZ479K02	COIL PEAKING	4.7UH 3.5MM K (LAL02TB)
L603	5CPZ479K02	COIL PEAKING	4.7UH 3.5MM K (LAL02TB)
L650	5MC0000100	COIL BEAD	MD-5 (HC-3550)
L801	5MC0000100	COIL BEAD	MD-5 (HC-3550)
L803	5MC0000100	COIL BEAD	MD-5 (HC-3550)
R101	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R102	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R103	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J
R104	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R105	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J
R106	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R107	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R113	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R114	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R115	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R116	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R117	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R120	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R310	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R311	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R340	RD-4Z473J-	R CARBON FILM	1/4 47K OHM J
R350	RN-4Z1201F	R METAL FILM	1/4 1.2K OHM F
R351	RN-4Z1201F	R METAL FILM	1/4 1.2K OHM F
R370	RD-4Z159J-	R CARBON FILM	1/4 1.5 OHM J
R394	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R395	RD-4Z394J-	R CARBON FILM	1/4 390K OHM J
R396	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J
R397	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J
R398	RD-2Z828J-	R CARBON FILM	1/2 0.82 OHM J
R401	RD-4Z272J-	R CARBON FILM	1/4 2.7K OHM J
R402	RD-4Z220J-	R CARBON FILM	1/4 22 OHM J
R404	RD-4Z399J-	R CARBON FILM	1/4 3.9 OHM J
R420	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
R501	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R502	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R505	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R506	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
R507	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R508	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
R509	RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
R512	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R513	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R514	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R515	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R516	RD-AZ393J-	R CARBON FILM	1/6 39K OHM J
R517	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R518	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R520	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R521	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R522	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R523	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R524	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R525	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R526	RD-4Z479J-	R CARBON FILM	1/4 4.7 OHM J
R527	RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
R528	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R530	RD-AZ470J-	R CARBON FILM	1/6 47 OHM J
R531	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R533	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R534	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R537	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R538	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R539	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R540	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R541	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R542	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R543	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R544	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R545	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
R546	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R547	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R548	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R549	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R550	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R551	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J

⚠	Symbol No.	Part No.	Part Name	Description
	R723	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
	R555	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	R556	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
	R567	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R570	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R580	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
	R585	RD-AZ224J-	R CARBON FILM	1/6 220K OHM J
	R586	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
	R587	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R588	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R589	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R591	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
	R592	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	R593	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	R594	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	R595	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
	R597	RN-4Z1502F	R METAL FILM	1/4 15K OHM F
	R598	RN-4Z1502F	R METAL FILM	1/4 15K OHM F
	R599	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R605	RD-AZ751J-	R CARBON FILM	1/6 750 OHM J
	R606	RD-AZ751J-	R CARBON FILM	1/6 750 OHM J
	R608	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J
	R609	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J
	R610	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R614	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R615	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R620	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R621	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R622	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R650	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
	R660	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J
	R661	RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
	R662	RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
	R700	RD-2Z332J-	R CARBON FILM	1/2 3.3K OHM J
	R710	RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
	R711	RD-AZ431J-	R CARBON FILM	1/6 430 OHM J
	R713	RD-AZ681J-	R CARBON FILM	1/6 680 OHM J
	R720	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
	R721	RD-AZ181J-	R CARBON FILM	1/6 180 OHM J
	R722	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
	R723	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
	R724	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J
	R805	RD-2Z100J-	R CARBON FILM	1/2 10 OHM J
	R807	RD-2Z272J-	R CARBON FILM	1/2 2.7K OHM J
	R810	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
⚠	R811	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K
	R817	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
	R820	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
	R821	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J
	R823	RD-4Z512J-	R CARBON FILM	1/4 5.1K OHM J
	R829	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
	R830	RD-AZ332J-	R CARBON FILM	1/6 3.3K OHM J
	R840	RD-4Z220J-	R CARBON FILM	1/4 22 OHM J
	R841	RD-2Z479J-	R CARBON FILM	1/2 4.7 OHM J
	R850	RD-2Z479J-	R CARBON FILM	1/2 4.7 OHM J
	R855	RD-4Z335J-	R CARBON FILM	1/4 3.3M OHM J
	R870	RD-2Z222J-	R CARBON FILM	1/2 2.2K OHM J
	R888	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	R910	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R911	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R912	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	R913	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K
	R914	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K
	R915	RC-2Z102K-	R CARBON COMP	1/2 1K OHM K
	R921	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
	R922	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
	R923	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
	R951	RD-4Z244J-	R CARBON FILM	1/4 240K OHM J
	R952	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J
	R953	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
	R954	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
	R955	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J
	RA01	RD-AZ680J-	R CARBON FILM	1/6 68 OHM J
	RA02	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	RA03	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	RA04	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
	RA05	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
	RA06	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J

⚠ Symbol No.	Part No.	Part Name	Description
RA08	RD-AZ75OJ-	R CARBON FILM	1/6 75 OHM J
RA09	RD-AZ75OJ-	R CARBON FILM	1/6 75 OHM J
RA10	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
RA11	RD-AZ68OJ-	R CARBON FILM	1/6 68 OHM J
RA12	RD-AZ68OJ-	R CARBON FILM	1/6 68 OHM J
RA16	RD-AZ68OJ-	R CARBON FILM	1/6 68 OHM J
RA19	RD-AZ75OJ-	R CARBON FILM	1/6 75 OHM J
RA20	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RA21	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
RA40	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
RA41	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
RA44	RD-AZ682J-	R CARBON FILM	1/6 6.8K OHM J

MEMO

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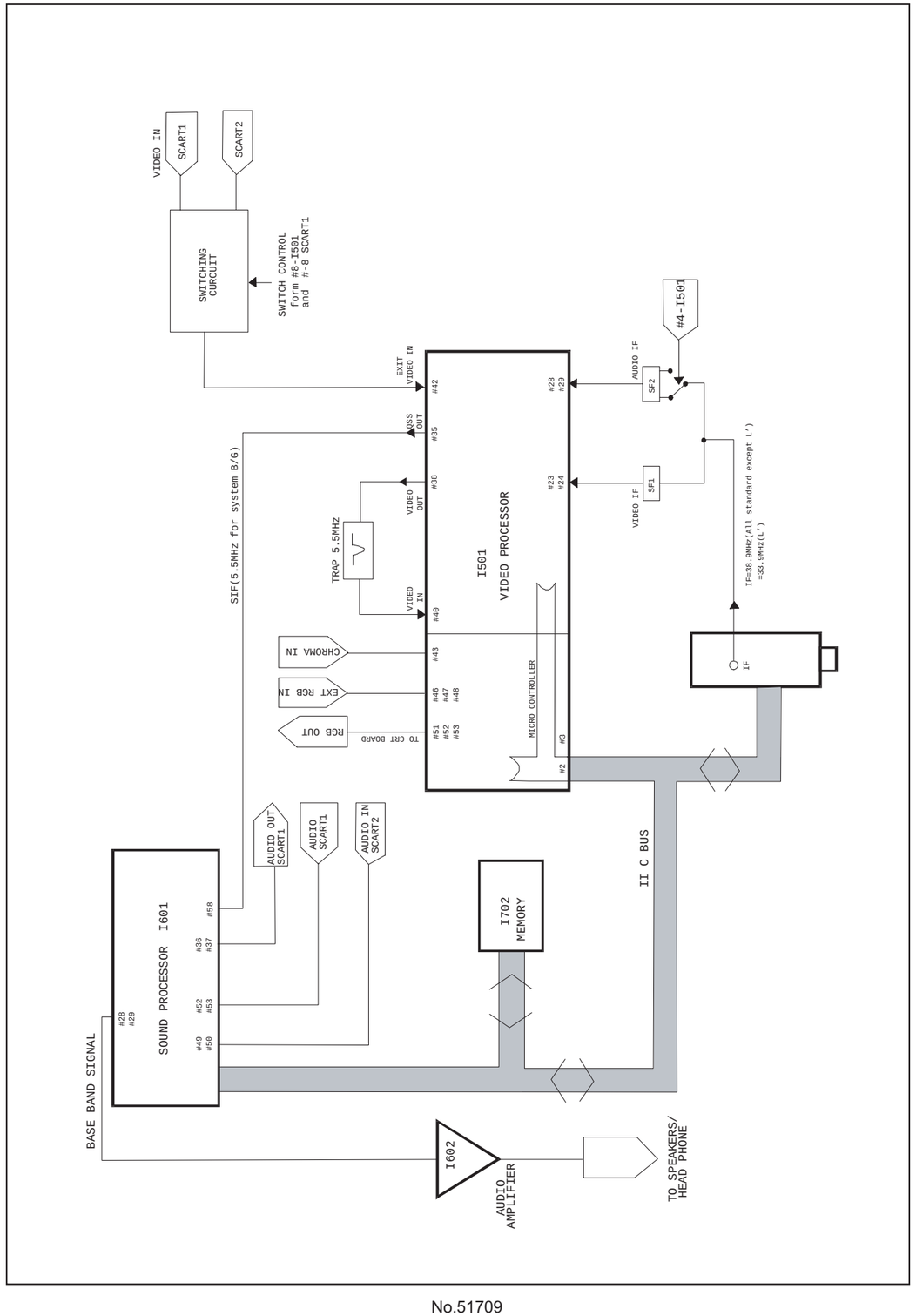
HOME AV NETWORK BUSINESS UNIT 1106 Heta, Iwai-city, Ibaraki-prefecture, 306-0698, Japan

Printed in Japan
VP 0010
AO/MS/MH

BLOCK DIAGRAM



REVISED

Please throw it out the service manual for AV-28BD5EKI/EKIS/EP/EPS/EE/EES issued in Jun. 2000,and use this service manual (No.51709 Oct. 2000).

AV-28BD5EKI / AV-28BD5EP / AV-28BD5EE
AV-28BD5EKIS / AV-28BD5EPS / AV-28BD5EES
STANDARD CIRCUIT DIAGRAM

■ NOTE :

1. RESISTANCE IS SHOWN IN OHM. K=1000, M=1000000
2. UNLESS OTHERWISE NOTED IN SCHEMATIC ALL CAPACITOR VALUES ARE EXPRESSED IN μF
3. VOLTAGES READ WITH "VTVM" FROM POINT INDICATED TO CHASSIS GROUND USING A COLOR BAR SIGNAL WITH ALL CONTROLS AT NORMAL LINE 230V AC VOLTAGE READINGS SHOWN ARE NORMAL VALUES AND MAY VARY +20% EXCEPT H.V
4. THIS CIRCUIT DIAGRAM IS A STANDARD ONE CIRCUIT PRINTED MAY BE SUBJECT TO CHANGE FOR PRODUCT IMPROVEMENT WITHOUT PRIOR NOTICE.

■ WARNING :

BEFORE SERVICING THE CHASSIS, READ "X-RAY RADIATION", "SAFETY PRECAUTION", AND "PRODUCT SAFETY NOTICE" IN SERVICE MANUAL.

■ PRODUCT SAFETY NOTE :

COMPONENTS MARKED WITH ⚠ ARE IMPORTANT FOR MAINTAINING.
THE SAFETY OF THE SET AND SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL OR SPECIFIED ONE IN THE PARTS LIST.
DON'T DEGRADE THE SAFETY THROUGH IMPROPER SERVICING.

■ CAUTION TO SERVICE TECHNICIANS :

BEFORE RETURNING THE RECEIVER TO CUSTOMER, LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS SHOULD BE PERFORMED TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

RESISTOR

CARBON FILM	
R M-OXIDE	(M)
CARBON COMP	(CC)
FUSIBLE	(F)
CEMENT	(C)

CAPACITOR

ELECTRO	
CERAMIC	
CERAMIC CH	(CH)
ELECTRO NONPOLAR	(NP)
MYLAR	(M)

COIL

PEAKING	
CHOKE	(C)
BEAD	(B)

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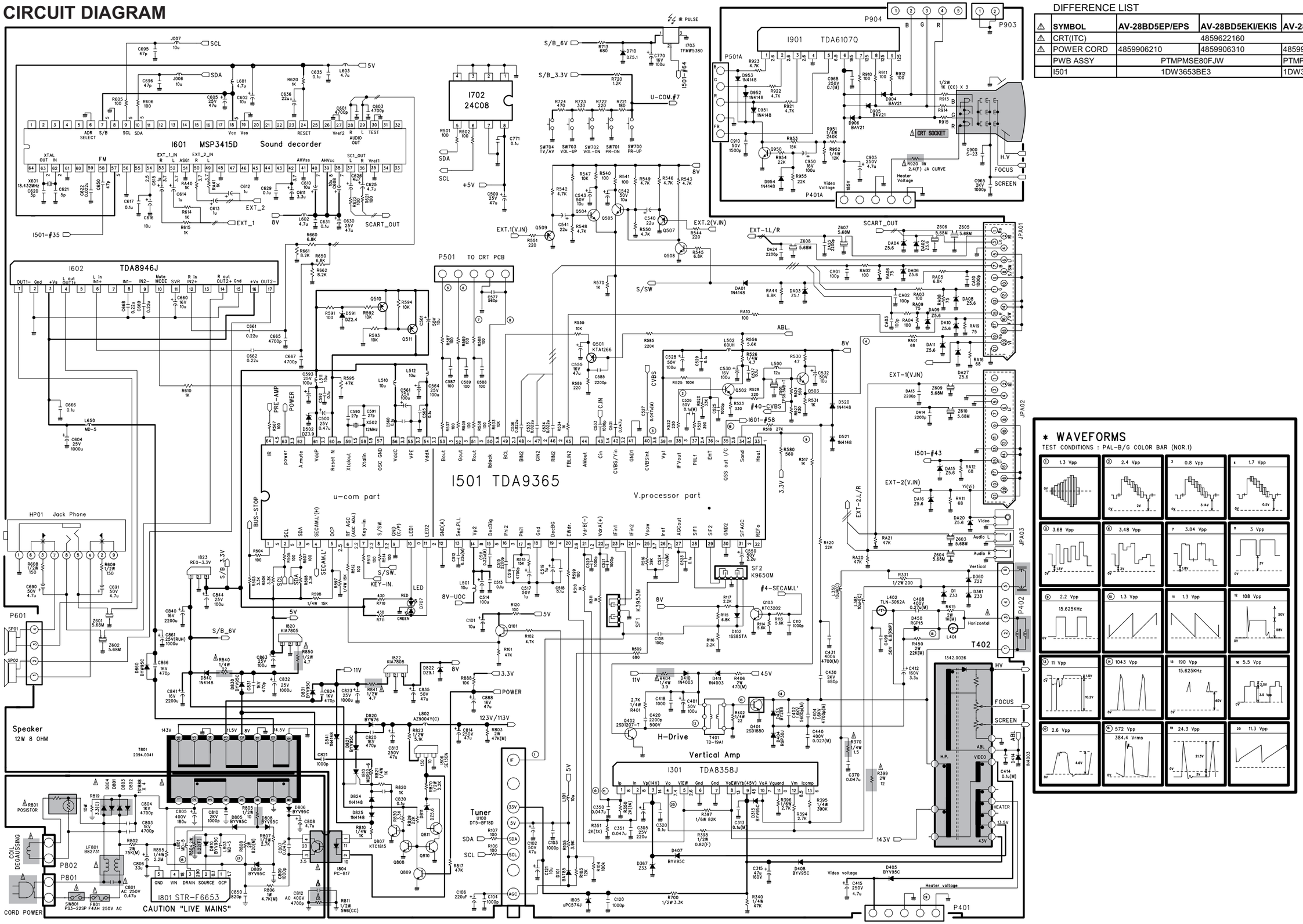
AV-28BD5EKIS AV-28BD5EPS AV-28BD5EES

CIRCUIT DIAGRAM

DIFFERENCE LIST

⚠	SYMBOL	AV-28BD5EP/EPS	AV-28BD5EKI/EKIS	AV-28BD5EE/EES
⚠	CRT(ITC)	4859622160		
⚠	POWER CORD	4859906210	4859906310	4859906210
	PWB ASSY	PTMPMSE80FJW		PTMPMSE83FJW
	I501	1DW3653BE3		1DW3653BD3



AV-28BD5EKI AV-28BD5EP AV-28BD5EE
AV-28BD5EKIS AV-28BD5EPS AV-28BD5EES

PATTERN DIAGRAMS

FRONT

TOP

CRT SOCKET PWB PATTERN